

2. On a new Species of Fruit-Pigeon from the Pacific Island of Rapa or Opara. By OTTO FINSCH, Ph.D., C.M.Z S., &c., Curator to the Bremen Museum.

[Received November 30, 1873.]

*PTILONOPUS HUTTONI*, sp. nov.

Diagn. *Major*; pileo usque ad occiput pulchre violascenti-purpureo; macula mandibulari hinc inde violascenti-purpurea; mento pallide purpureo; capite reliquo, collo toto, guttureque virescenti-cinereis; macula pectorali magna obscure purpureo-violacea, lateribus viridibus; ventre crissoque obsolete flavis; subcaudalibus violascenti-purpureis; dorso, tergo, uropygio, tectricibus alarum et cauda olivaceo-viridibus; secundariis distinctius viridibus, pogonio externo anguste flavo marginato; scapularibus ultimis macula triangulari anteapicali lilacina; cauda obscure viridi, apice anguste albida; rostro plumbeo, apice flavido; pedibus flavescentibus.

Front and crown of a beautiful purplish violet-red, as well as a patch at the base of the lower jaw; the chin, between the rami of the lower jaw, also red, but much paler than the crown; the red of the crown surrounded very indistinctly by a narrow line of green; occiput, nape, sides of head, neck, throat and crop ashy grey, washed faintly with green; the feathers on the throat and crop bifurcated, and dull olive-green on the centre, which gives these parts a more green appearance; middle of the upper part of throat pale yellowish, with the bases of the feathers white, forming an indistinct pale longitudinal patch just below the chin; breast covered by a very large patch of dark purplish violet, with dark olive-green at the base of feathers; sides of breast, vent, and flanks, and the upper part of vent dark olive-green; lower part of vent, anal region, and the hind part of thighs dirty yellow, with the base of the feathers white; under tail-coverts purplish violet-red, like the crown, with yellowish basal portion; feathered tarsus and under wing-coverts dark greenish ashy; back and upper parts dark olive grass-green; quills black on the inner web, on the outer web dark shining green, margined very narrowly with yellowish, which on the primaries is nearly invisible; apical portion of quills under certain lights with strong coppery reflections; tectrices of secondaries dark green, with broader and more distinct yellowish margins along the outer web; larger shoulder-coverts with a triangular spot of dull lilac; wing beneath blackish-grey; tail-feathers dark shining green, like the quills, on the inner web black, with a very narrow apical margin of yellowish white; under certain lights the margins of the outer web and the apical portion with coppery reflections; underside of tail blackish; bill horny-grey, with yellowish apical portion; feet pale (apparently yellow in the living bird) with horn-coloured nails; "eye pink" (collector's note).

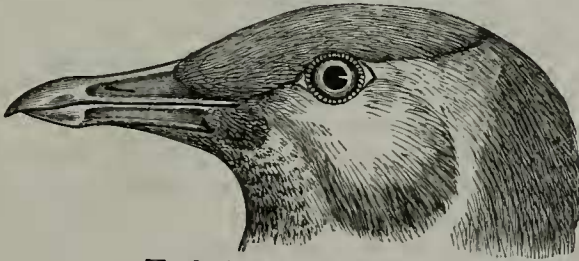
Long. tot.	alæ.	caud.	rostr. à front.	rostr. à rict.	tars.	dig. med.	ung.
12·20	6·70	4·90	·75	1·15	1·20	·95	·35 (poll. Angl.).

*Hab.* Island of Rapa or Opara, South Sea.

The unique specimen of this bird was forwarded to me through the kindness of my friend Capt. F. W. Hutton, now Professor of Natural History and Geology in the University of Otago, Dunedin, New Zealand, after whom I have the pleasure of naming it.

The specimen is marked in the collector's handwriting "*female*." It may be expected that the male would exhibit a somewhat brighter coloration, although we know that in the members of the genus *Ptilonopus* the plumage of both sexes is nearly exactly alike.

*Pt. huttoni* is one of the most extraordinary *Ptilonopi* known. In the pattern of its coloration it shows some resemblance to *Pt. roseicapillus*, Less. (*Pt. purpureocinctus*, Gray), and *Pt. mercieri*, having, as in these species, a red spot on the base of the lower jaw; but it is easily distinguishable from all the other Polynesian Fruit-Pigeons by its pale purplish-red chin, and the extraordinarily large pectoral patch of dark purplish violet. But far more than by these peculiarities of colours, *Pt. huttoni* is distinguished by its large size and the unusually long and strong bill, as will be seen in the accompanying drawing of the head, of its natural size. The bill, in-



Head of *Ptilonopus huttoni*.

deed, differs very much from that of the typical *Ptilonopi*, and resembles rather that of the true *Columba*, but is still more elongated and slender. The first primary shows the peculiar attenuation on the terminal portion; and the two basal thirds of the tarsus are feathered, as in true *Ptilonopus*; the tail is proportionally longer, even at the end, and has 14 rectrices.

The island of Rapa, erroneously called on our maps Opara, is situated in  $27\frac{1}{2}^{\circ}$  S. latitude, and  $144^{\circ}$  W. longitude, about 700 miles S.E. of the Society group, and some  $40^{\circ}$  S. of the tropic of Capricorn, and as nearly as possible two thirds of the distance between Panama and Wellington. It was first discovered by the English navigator Vancouver, and is now under the protectorate of the French. During the time when a direct steamer-line was running from Panama to New Zealand, it was selected as a coal-station and port of call, possessing a harbour. A full account of the island has

been given by Captain John Vine Hall\*, whose interesting and instructive paper may be referred to for further information.

In respect of animal life on Rapa, Capt. Vine Hall only tells us that wild goats are in abundance, as well as rats; of the birds he says only, "there are a few fowls wild in the bush, some widgeon, and of course sea-gulls;" but he does not mention pigeons. I am not aware whom we have to thank for the discovery of this remarkable *Ptilonopus*; but I think I am not wrong in suspecting that the specimen was obtained during the period when the Panama and New-Zealand line of steamers was running. This line was stopped some time ago; so that it will now be very difficult to get more specimens of this bird.

The geographical distribution of the Fruit-pigeons in the numerous islands of the Pacific is very interesting, and confirms the rule that insular regions produce a great quantity of species, peculiar in many cases to very small islands. Thus we find only *Ptilonopus perousii* generally distributed over the Central Polynesian island-groups, *i. e.* the Friendly, Navigators', and Feejee groups. *Pt. fasciatus*, Peale, is found on the Feejees, Navigators', and the small island Uea of the Wallis group. All the other groups possess their peculiar species:—the Friendly Islands, *Pt. porphyraceus*, Forst.; the Society Islands, *Pt. purpuratus*, Gmel., and *Pt. chrysogaster*, Gray; the Marquesas, *Pt. mercieri*, Des Murs, and *Pt. dupetit-thouarsi*, Neboux; the Paumotu group, *Pt. coralensis*, Peale; the Hervey (Cook) Islands, *Pt. rarotongensis*, H. & F., and the very unsatisfactorily known *Pt. chalcurus*, Gray; the Pelews, *Pt. pelewensis*, H. & F.; the Mariannes, *Pt. roseicapillus*, Less.; the New Hebrides and New Caledonia, *Pt. grayi*, Gray, and *Pt. holosericeus*, Temm. Although some of these are nearly allied to each other, they are nevertheless valid species, which keep their distinctive characters always exact. At least, after a long acquaintance with most of them, I can declare that I have never found specimens which would lead to the belief that there exist intermediate forms between them. It must be remarked as a singular fact that in those island groups where two species occur, these are totally different and confined in their distribution to certain localities. Thus in the Society Islands we find *Pt. purpuratus* only on Tahiti, *Pt. chrysogaster* on Huaheine. As very prominent features in the geographical distribution of the genus *Ptilonopus* in the Pacific, we must further notice the total absence of Pigeons on the Sandwich Islands, and the occurrence of very peculiar species on certain remote and isolated islands. Thus the beautiful *Chrysæna victor*, Gould, is confined to Taviumi, one of the smallest islands of the Feejee group, whereas *Chrysæna luteovirens*, H. & J., lives in Viti-Levou and Ovalau, and now we learn that so small an island as Rapa produces one of the most remarkable species of the genus. In considering all these points we shall find it extremely difficult to explain what has caused such extraordinary phenomena

\* "On the Island of Rapa" in Trans. and Proceed. of the N. Z. Inst. vol. i. (1869), pp. 128-134.

in geographical distribution ; and, to confess the truth, we must allow that we are still far off from understanding these questions satisfactorily, and that hypothesis only will serve us to answer them.

### 3. Note on the Locality of *Oryx beatrix*.

By Major O. B. C. ST. JOHN, F.Z.S.

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In November 1864 I was at Maskat with Colonel Lewis Pelly, H.M.'s Resident in the Persian Gulf. Breakfasting at a country house of the Imam's, some five or six miles from the town, we were told that a rare animal, described as a wild cow, was kept there as a curiosity. On going into the yard where it was confined I recognized it at once as an Oryx, and from its pure white colour I supposed it to be a Leucoryx (*Oryx leucoryx*), in which idea I was strengthened by finding in an illustrated book of natural history that the habitat of that species is South Persia and Arabia. The specimen we were looking at, a full-grown female, was immediately offered for Colonel Pelly's acceptance, and was shortly afterwards sent by him to the Botanical Gardens at Poonah. It had been brought, I was told, from the country on the other side of the high mountains to the south of Maskat, which could not be reached under a week's camel-ride. As it is not, I believe, mentioned by any of the travellers in Central Arabia, it is probably confined to the comparatively fertile highlands of South-Eastern Arabia, the richest but least-known region of that country.

On visiting this Society's Gardens in 1867, on my return to England, I saw at once that the Leucoryx there exhibited from Western Africa was not identical with my Maskat specimen ; nor was I able to find out to what species the latter should be referred. In 1869, being again in the Persian Gulf, I begged Colonel Pelly to obtain more specimens from Maskat, and, visiting him the next year, found that he had procured a pair. Of these the male, the horns of which were imperfect, was accidentally killed ; and the female was sent to England\*. There was little difference in size between the sexes, and, so far as could be seen, none in the length of horn. Both the animals were extremely tame, being allowed perfect liberty to wander about in the vicinity of Colonel Pelly's country house near Wushire.

Is there any Member of the Zoological Society at Aden who would make inquiries as to the occurrence of this Antelope in that part of Arabia ?

\* See notice of the arrival of this animal, P. Z. S. 1872, p. 603.